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09/673,614	10/19/2000	Jean-Francois Grimaldi	Q61365	2115

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EXAMINER

NGUYEN, PHUONGCHI T

ART UNIT PAPER NUMBER

2833

DATE MAILED: 11/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/673,614

Applicant(s)

GRIMALDI ET AL.

Examiner

Phuongchi T Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
- ☐ received.
 - ☐ received in Application No. (Series Code / Serial Number) _____.
 - ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 14) ☐ Notice of References Cited (PTO-892)
- 15) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 16) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 17) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 18) ☐ Notice of Informal Patent Application (PTO-152)
- 19) ☐ Other: _____.

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DETAILED ACTION

1. Applicant's amendment of July 22, 2003 is acknowledged. It is noted that claims 1, 3, 5, 9, 12, 13, 14 and 15 are amended.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless (e) The invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1, 3-5, 7 and 14-16 are rejected under 35 U.S.C. 102(e) as being anticipated by W. H. McKee (US3115379).

In regard to claim 1, W. H. McKee discloses (attachment 1) a spring contact (1 S) for use in a connector, which spring contact (15) is substantially U-shaped and has two branches (20', 21') and a base (13) joining the first and second branches (20', 21') at one end for forming a U-shape, and wherein each of the first and second branches (20', 21') complete an electrical circuit with a device (contact at 1 inside a device), characterized in that the first and second branches (20', 21') lie in two diverging planes where the branches (20', 21') connect to the base (13). The intersection (A) of the two planes (20', 21') is within the base (13) of the U-shape, and the first branch (portion B of 20') and the base (13) are coplanar and where the first and second branches (20', 21') are formed integrally with the base (13).

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In regard to claim 3, W. H. McKee discloses (attachment 1) the spring contact (15) characterized in that the electrical contact of at least one branch (20' or 21') is made at the free end (C) of the branch (20' or 21').

In regard to claim 1, W. H. McKee discloses (attachment 2) a spring contact (15) for use in a connector, which spring contact (15) is substantially U-shaped and has two branches (20', 16) and a base (13) joining the first and second branches (20', 16) at one end for forming a Ushape, and wherein each of the first and second branches (20', 16) complete an electrical circuit with a device (contact at 1 inside a device), characterized in that the first and second branches (20', 16) lie in two diverging planes where the branches (20', 16) connect to the base (13). The intersection (A) of the two planes (20', 16) is within the base (13) of the U-shape, and the first branch (portion B of 20') and the base (13) are coplanar and where the first and second braches (20', 16) are formed integrally with the base (13).

In regard to claim 3, W. H. McKee discloses (attachment 2) the spring contact (15) characterized in that the electrical contact of at least one branch (20' or 16) is made at the free end (C) of the branch (20' or 16).

In regard to claim 4, W. H. McKee discloses (attachment 2) the spring contact (15) characterized in that one of the first and second branches (16) is adapted to come into contact with a printed circuit (25) and the other of the first and second branches (20') is adapted to come into contact with a battery; The shape of the contacts allows contact with theses devices. They are therefore seen to be adapted to do so.

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In regard to claim 5, W. H. McKee further discloses (attachment 2) an electrical connector comprising a first face (where 20' located) and a second face (where 16 located) opposite the first face (where 20' located), and at least one housing (Column 3, lines 66) for receiving a spring contact (15) and opening onto both of the first and second faces (where 20' and 16 located), wherein the spring contact (15) is positioned in the housing so that a plane containing a base (13) of the U-shape is substantially parallel to the respective planes of the faces (where 16 located) of the connector.

In regard to claim 7, W. H. McKee discloses (attachment 2) the connector further comprising a retainer (housing, Column 3, lines 66) for retaining the spring contact (15) in the housing.

In regard to claim 14, in further limit of claim 1 based on attachment 2, W. H. McKee discloses (attachment 2) the first branches (20') make electrical contact with a first device (contact at 1 of the device), and the second branches (16) make electrical contact with a second device (circuit board) (figure 15).

In regard to claim 15, W. H. McKee discloses (attachment 2) the connector characterized in that the electrical contact (15) of at least one branch (20') is made at the free end (C) of the branch (20').

In regard to claim 16, W. H. McKee discloses (attachment 2) the spring contact (15) characterized in that the second branches (16) is a printed circuit (figure; 15) and the first branches (20') is a battery; The shape of the contacts allows contact with theses devices. They are therefore seen to be adapted to do so.

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4. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Gettig et al (US4, 963,102).

In regard to claim 1, Gettig et al discloses (attachment 3) a spring contact (T) for use in a connector, which spring contact (T) is substantially U-shaped and has two branches (54, 70) and a base (A) joining the first and second branches (54, 70) at one end for forming a U-shape, and wherein each of the first and second branches (54, 70) complete an electrical circuit with a device (contact to mating contact), characterized in that the first and second branches (54, 70) lie in two diverging planes where the branches (54, 70) connect to the base (A). The intersection of the two planes is within the base (A) of the U-shape, and the first branch (54) and the base (A) are coplanar, and where the first and second branches (54, 70) are formed integrally with the base (A).

In regard to claim 3, Gettig et al discloses (attachment 3) the spring contact (T) characterized in that the electrical contact of at least one branch (54) is made at the free end (56) of the branch (54).

5. Claims 1, 3-8 and 10-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Hughes et al (US6, 077,130).

In regard to claim 1, Hughes et al discloses (figure 3) a spring contact (6) for use in a connector, which spring contact (6) is substantially U-shaped and has two branches (22, 24) and a base (30) joining the first and second branches (22, 24) at one end for forming a U-shape, and wherein each of the first and second branches (22, 24) complete an electrical circuit with a device (54), characterized in that the first and second branches (22, 24) lie in two diverging

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planes where the branches (22, 24) connect to the base (30). The intersection (28) of the two planes is within the base (30) of the U-shape, and the first branch (22) and the base (30) are coplanar and where the first and second branches (22, 24) are formed integrally with the base (30).

In regard to claim 3, Hughes et al discloses (figure 3) the spring contact (6) characterized in that the electrical contact of at least one branch (22) is made at the free end (36) of the branch (22).

In regard to claim 4, Hughes et al discloses (figure 3) the spring contact (6) characterized in that one of the first and second branches (22) is adapted to come into contact with a printed circuit (18) and the other of the first and second branches (24) is adapted to come into contact with a battery; The shape of the contacts allows contact with these devices. They are therefore seen to be adapted to do so.

In regard to claim 5, Hughes et al further discloses (figure 3) an electrical connector (2) comprising a first face (adjacent 18) and a second face (adjacent 12) opposite the first face (adjacent 18), and at least one housing (12) for receiving a spring contact (6) and opening (where 10 located, and slot 64 located) onto both the first face (adjacent 18) and the second face (adjacent 12) (figure 2), wherein the spring contact (6) is positioned in the housing (12) so that a plane (adjacent 18) containing a base (30) of the U-shape is substantially parallel to the respective planes of the faces (adjacent 18) of the connector (2).

In regard to claim 6, Hughes et al discloses (figure 3) the connector (2) further comprising a guide (slot 64) to guide the spring contact (6) into position in the housing (12).

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In regard to claim 7, Hughes et al discloses (figure 4) the connector (2) further comprising a retainer (10) for retaining the spring contact (6) in the housing (12).

In regard to claim 8, Hughes et al discloses (figure 1) the connector characterized in that one branch (24) of the spring contact (6) projects from the housing (12).

In regard to claim 10, Hughes et al discloses (figure 1) the connector characterized in that one face (adjacent 18, 14) of the connector (2) has a pick-up area (44) substantially at the center of atop face (of 12).

In regard to claim 11, Hughes et al discloses (figure 3) the connector having lateral faces (14, adjacent 8) joining the first and second faces (adjacent 18, 12), characterized in that the lateral faces (14, adjacent 8) include at least one recess (52) and a free end (50) of one branch (24) of the spring contact (6) projects into the recess (52) (see figure 5).

Allowable Subject Matter

6. Claims 9, 12, 13 are allowed.

Response to Arguments

7. Applicant's argument of the inherency of "the housing of McKee" in the claims 5, 7 and 14-16 should be necessarily presented, this is not deemed persuasive. The housing of McKee is not shown in the drawing; however, the housing of McKee is disclosed in the specification of McKee at Column 3, lines 65-67.

8. Applicant's argument of (claims 14-16) "the individual branches 20' and 21' do not complete an electrical circuit with two different devices" is not deemed persuasive. As shown in figure 15, the first branches 20' make electrical contact with a first device labeled as numeral

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reference 1 (also called as a mating connector 1), the second branches 16 make electrical contact with a second device labeled as a circuit board, which is not the same as the first device.

9. Applicant's argument of "the two braches 20' and 21' are coplanar with the base 13" rejected by Examiner 's Attachment 2 of claim 1, is not deem persuasive. In the office action above, McKee discloses the first branch (portion B of 20') and the base (13) are coplanar.

10. Applicant's argument of (claim 1 of Gettig et al) "the upper branch 54 and the lower branch 66 are two separate distinct pieces which are joined together at or near the tongues 84" is not deem persuasive. Gettig et al discloses a base (A) joining the first and second branches (54, 70) at one end (adjacent 26) for forming a U-shape (figure 7).

11. Applicant's argument of (claim 1 of Hugh et al) "the arm 24 extend in a vertical plane with respect to the base 28...the planes which contain the arm 24 and the arm 26 are not intersecting within the base 28" is not deem persuasive. Firstly, the first arm (or the first branch) is labeled as 22; the second arm (or the second branch) is labeled as 24. Secondly, in the office action above, Hugh et al discloses a base (30) joining the first and second branches (22, 24) at one end ... where the branches (22, 24) connect to the base (30).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PhuongChi Nguyen whose telephone number is (703) 305-0729. The examiner can normally be reached on Monday through Thursday from 8:00AM to 4:30PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Austin Bradley, can be reached on (703) 308-2319. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

October 1, 2003



Gary Paumen
Primary Examiner